

A method of repairing opaque defects in lithography masks entails focused ion beam milling in at least two steps. The first step uses a large pixel spacing to form multiple holes in the defect material, with the milled area extending short of the defect material edge. The final step uses a pixel spacing sufficiently close to produce a smooth floor on the milled area, and extends to the edge of the defect. During the second step, an etch enhancing gas such as bromine is preferably used.